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2009 Ecuador Fresh Flower Industry Situation

Report Categories:

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Report Highlights:

Producing flowers is a high-risk, highly-profitable investment opportunity in Ecuador. The expected return on investment (ROI) in good economic times is above 30%.

Ecuadorian flowers, particularly roses, are well positioned in international markets. Over the last decade, flower exports have increased from US$ 195 million in the year 2000 to US$ 565 million in the year 2008. According to Post estimates, the importance of the U.S. market decreased from 46% market share to 24% during that period.

Executive Summary:

Producing flowers is a high-risk, highly-profitable investment opportunity in Ecuador. The expected return on investment (ROI) in good economic times is above 30%.

Ecuadorian flowers, particularly roses, are well position in international markets. Over the last decade, flower exports have increased from US$ 195 million in the year 2000 to US$ 565 million in the year 2008. According to Post estimates the importance of the U.S. market decreased from 46% market share to 24% during that period.

The industry employs about 116,000 direct hired employees, of whom 60% are women. Most firms are leaders in the adoption of environmentally friendly and social responsibility practices. The area planted covers approximately 6,150 hectares in eight provinces.

Flower production has largely benefitted from the U.S. Andean Trade Promotion and Drug Eradication Act that enables Ecuadorian flowers to enter the U.S. market facing zero tariffs.

The industry faces serious challenges to its sustainability due to the lack permanent preferential tariff access to major markets in the U.S. and Europe, high air transportation costs due to current aviation polices and overall poor transportation infrastructure, in addition to recent labor reforms that have made it very difficult to hire part-time workers.

General Information:

Ecuador's flower export business is a success story of the country's efforts to diversify its export base. Since the mid 1980s, the sector has continuously increased its size relative to traditional agricultural exports such as bananas and cocoa. It has been an important factor behind the revitalization of the country's rural economy of the Sierra region. Floriculture entrepreneurs have been the main drivers of female employment. They also lead in providing additional services to employees such as health care centers and nurseries.

Producing flowers is a high-risk, highly-profitable investment opportunity in Ecuador. The expected return on investment (ROI) in good economic times is above 30%, which means that in a little over 3 years an investor could recover the cost of investment.

Since 1991 when the U.S. Congress ratified the Andean Trade Preferences Act (ATPA), later Andean Trade Promotion and Drug Eradication Act (ATPDEA), Ecuadorian export of flowers face almost no tariff barriers to entering the U.S. market. Before 1991, exports of flowers were charged a tariff between 6.4 to 6.8 percent.

The development of this industry has by no means been a smooth process. Internally, Ecuador is a high-risk country with ongoing political and economic problems that might endanger the stability of any business. Externally, the flower sector is often criticized by producers in other countries that may have lost market share and for environmental groups that claim abuses to workers. The United States, for instance, between September 1994 and March 1995, implemented a tariff of 49.75 per cent on the import of roses from Ecuador amid dumping charges. This adverse situation had a positive side though, encouraging greater efforts to improve Ecuador's productivity and ultimately dumping charges were eliminated.

THE FLOWER SECTOR IN ECUADOR'S GDP

YEAR	TOTAL GDP ('000 Dollars)	AG. GDP ('000 Dollars)	SHARE OF AG. IN TOTAL GDP AS %	GDP FLOWERS ('000 Dollars)	SHARE OF FLOWERS IN IN AG. GDP AS %
2000	15,933,666	1,465,783	9.20	220,998	15.08
2001	16,784,095	1,523,636	9.08	249,961	16.41
2002	17,496,669	1,619,503	9.26	291,015	17.97
2003	18,122,313	1,689,958	9.27	281,098	16.63
2004	19,572,229	1,726,414	8.63	286,709	16.61
2005	20,747,176	1,814,314	8.61	317,422	17.50
2006	21,553,301	1,877,165	8.70	320,105	17.05
2007	22,090,180	1,959,415	8.87	323,309	16.50

Source: Expoflores

On the supply side, in Ecuador there are about 800 flower companies; including producers, exporters, and vertically integrated producers. The sector is organized through several local groups and one national association of producers and exporters: Expoflores.

There are two key factors that influence the development of floriculture sector in Ecuador, one of them is associated with the country's geographical location (agro-climatic conditions: light intensity, light hours, high altitude), which

benefits the quality of the flower, its texture, size and color intensity. The second factor has to do with high productivity levels associated with efficient business management, resource control, and renovation of varieties. With respect to the second factor, the fact that Ecuador uses the U.S. dollar puts additional pressure on producers to increase productivity as external shocks such as a currency devaluation enjoyed by Colombian exporters, Ecuador's main competitors, are not available. The only way to continue in the market is to continuously increase competitiveness.

On the demand side, the characteristics of the importers vary in size and activities in the value chain that are willing to undertake. The characteristics of the flowers they seek also vary widely. For example, Russian customers of roses prefer a large size bud greater than 2 ¼ inches and a stem at least 27 ½ inches to 5 feet. On the other hand, U.S. buyers prefer a smaller size rose, unless they are buying for specialty niche markets such as hotels.

GROWTH IN EMPLOYMENT IN ECUADOR'S FLOWER SECTOR

YEARS	INDIRECT JOBS	DIRECT JOBS		
		TOTAL	WOMEN	MEN
1996	13,067	18,045	10,827	7,218
1997	18,335	25,320	15,192	10,128
1998	25,597	35,348	21,209	14,139
1999	25,863	35,715	21,429	14,286
2000	26,139	36,097	21,658	14,439
2001	26,400	36,457	21,874	14,583
2002	26,887	37,130	22,278	14,852
2003	28,352	39,153	23,492	15,661
2004	37,609	44,214	26,528	17,686
2005	38,000	58,259	34,955	23,304
2006	38,500	76,758	46,055	30,703
2007	42,500	86,360	51,816	34,544
2008	45,000	115.969*	69,581	46,388

* Ecuador's Social Security Administration changed the labor classification
Source: Expoflores and Ecuador's Social Security Administration

Production:

PRODUCTION PORTFOLIO AND GEOGRAPHICAL DISTRIBUTION

Regarding the size of the flower sector in Ecuador, the area planted has experienced a significant growth over the last 18 years as can be seen in the table below. From 286 hectares in 1990, the area planted has increased to over 6,000 hectares in the year 2008.

GROWTH OF HECTARES CULTIVATED IN 16 YEARS OF FLORICULTURE

YEAR	HECTARES
1990	286
1995	1,167
2000	* 3,480
2005	3,417
2006	** 6,445
2007	** 5,764
2008	** 6,150

Source: Expoflores, * Ecuador's Ministry of Agriculture's official statistics,
** Ecuador's National Statistics Institute

The flowers of greater importance planted in the country fall into the following categories: roses, gypsophile, summer

flowers, carnation and mini-carnation, and chrysanthemum.

The following table describes the distribution of area planted by type of flower. From the table it is clear that Ecuador has specialized in the production of two crops, roses and gypsophile (baby's breath). However, many farmers prefer to seek other niche markets and produce a great variety of other focals such as carnations and fillers such as delphinium, in addition to many other lines and greens.

AREA PLANTED OF FLOWERS BY TYPE OF FLOWER

CROP	2006	2007	2008
Rose	3,612	2,872	4,106
Gypsophile	1,309	1,376	975
Annual flowers (other)	158	230	312
Heliconia	76	402	148
Perennial flowers (other)	348	268	147
Delphinium	308	264	133
Carnation	35	51	115
Hypericum	250	173	106
Ginger	89	45	42
Limonium	65	22	23
Aster	83	28	22
Chrysanthemum	59	11	8
Larkspur	6	13	8
Liatris	47	9	5
TOTAL	**6,445**	**5,764**	**6,150**

Source: Ecuador's National Statistics Institute

The provinces in which flowers were grown during the year 2008, are as follow:

PROVINCIAL DISTRIBUTION OF AREA PLANTED IN ECUADOR, 2008

PROVINCE	# HECTARES	%
Pichincha	3994	64.9
Cotopaxi	1439	23.4
Azuay	207	3.4
Guayas	204	3.3
Carchi	121	2.0
Imbabura	116	1.9
Tungurahua	41	0.7
Cañar	30	0.5

Source: Ecuador's National Statistics Institute INEC

A detailed picture of the distribution of flower farms throughout Ecuador can be obtained from the following table.

PROVINCIAL DISTRIBUTION OF AREA PLANTED BY TYPE OF FLOWER IN ECUADOR, 2008

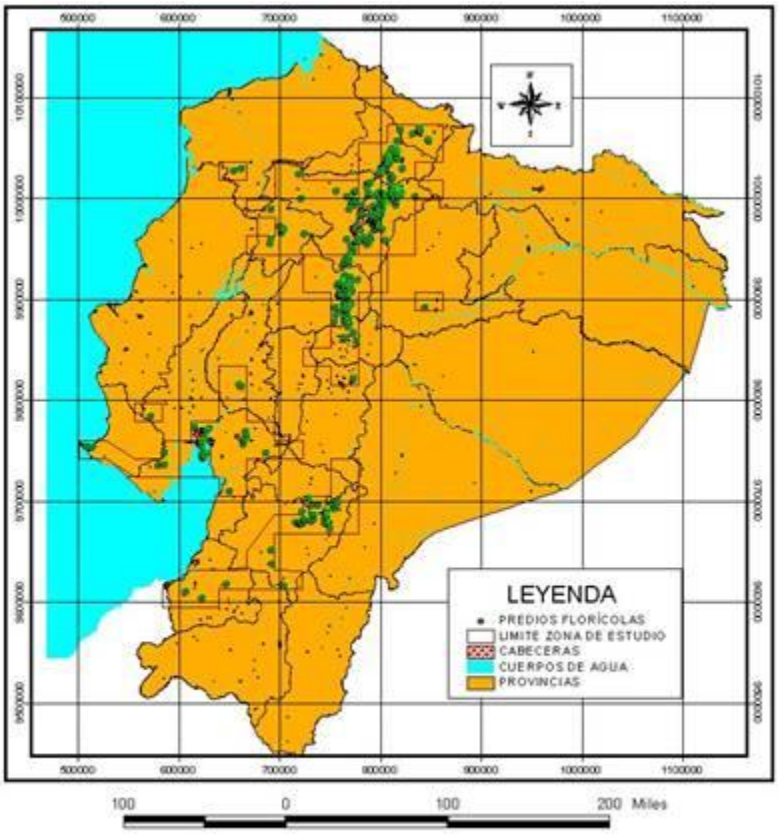
Crop	Pichincha	Cotopaxi	Azuay	Guayas	Carchi	Imbabura	Tungurahua	Cañar
Rose	2,549	1,294	31		101	73	28	30
Gysophile	817		142			16		
Annual flowers (other)	218	50		7		25	13	
Delphinium	133							
Perennial flowers (other)	118			9	20			
Hypericum	72		34					
Carnation	26	88						

Aster	22							
Limonium	15	7				2		
Chrysanthemum	8							
Larkspur	8							
Liatris	5							
Ginger	3			40				
Heliconia				148				
TOTAL	**3,994**	**1,439**	**207**	**204**	**121**	**116**	**41**	**30**

Source: Ecuador's National Statistics Institute INEC

The following map shows the exact location of the flowers farms in a map.

GEOGRAPHICAL DISTRIBUTION OF FLOWER FARMS IN ECUADOR



Source: Ecuador's Minister of Agriculture (2008)

Trade:

TRADE AND COMPETITION

Due to the importance of the floriculture sector in the Ecuadorian economy, it is important to show the exports that the country had presented in the last years. However, there are several difficulties associated with reporting trade statistics from official Ecuadorian sources. The lack of technical capacity to collect this information in addition to alleged misreporting by producers in order to reduce their tax burden contribute to the appearance of different trade scenarios that are presented next.

Regarding total export volume, for instance, the following two tables report discrepancies in the amounts exported.

Using Ecuador's official statistics the volume exported was equivalent to 104,172 MT in 2006 and 109,006 MT in 2008. In contrast, IATA's statistics report 151,933 MT for 2006 and 161,745 for 2008. However, there is no simple obvious explanation to this discrepancy in the statistics.

TOTAL ECUADORIAN EXPORTS OF FLOWERS BY VOLUME - CORPEI

EXPORTS	2000	2001	2002	2003	2004	2005	2006	2007	2008
VOLUME MT									
Rose	46,505	50,697	61,822	61,715	59,942	93,873	72,133	57,018	12
Carnation	1,327	1,066	1,367	396	584	727	799	778	0
Chrysanthemum	344	281	218	221	241	377	498	422	0
Others	30,654	22,191	20,229	18,036	24,093	27,215	30,743	31,577	108,993
TOTAL	**78,830**	**74,235**	**83,636**	**80,368**	**84,859**	**122,192**	**104,172**	**89,796**	**109,006**

TOTAL ECUADORIAN EXPORTS OF FLOWERS BY VALUE - CORPEI

EXPORTS	2000	2001	2002	2003	2004	2005	2006	2007	2008
VALUE (US$ '000)									
Rose	135,408	168,393	215,888	241,989	257,654	288,235	309,154	321,159	76
Carnation	2,928	2,870	2,985	1,384	2,503	3,256	3,895	4,309	0
Chrysanthemum	755	765	757	280	595	1,163	1,413	1,224	0
Others	55,565	66,027	70,701	65,090	94,073	105,259	121,390	142,070	565,382
TOTAL	**194,656**	**238,055**	**290,331**	**308,744**	**354,825**	**397,913**	**435,851**	**468,762**	**565,457**

Source: Ecuador's Export and Investment Promotion Corporation CORPEI

TOTAL ECUADORIAN EXPORTS OF FLOWERS BY VOLUME - IATA

	Exports Of Flowers (kilograms)				
	IATA 2006	IATA 2007	IATA 2008	% Change 2006 - 2007	% Change 2007 - 2008
January	12,139,573	15,447,468	15,050,648	27.25	-2.57
February	16,089,914	16,505,232	17,965,906	2.58	8.85
March	12,512,866	13,701,722	12,617,117	9.50	-7.92
April	12,625,848	13,714,829	14,546,793	8.63	6.07
May	13,511,977	14,979,157	14,271,621	10.86	-4.72
June	11,630,963	11,626,871	12,201,619	-0.04	4.99
July	11,161,322	11,739,436	11,647,302	5.18	-0.78
August	11,742,618	12,303,491	12,444,288	4.78	1.14
September	12,497,420	13,098,650	12,913,674	4.33	-0.96
October	13,892,296	13,765,896	14,569,329	-0.91	5.84
November	11,849,994	12,692,304	11,875,258	7.11	-6.44
December	12,278,353	12,926,786	11,636,433	5.28	-9.98
TOTAL	**151,933,155**	**162,441,842**	**161,744,994**	**6,92**	**-0.43**

Source: IATA, Expoflores

The same wide variation in statistics reporting the total volume of Ecuadorian exports of flowers is also found when analyzing the destination market. Thus, in the specific case of exports to the U.S., Ecuadorian official statistics report an amount exported equivalent to US$ 78,530,000 in 2000 and 83,452,0000 in 2008. However, U.S. Census data reports U.S. imports (F.O.B. value) equivalent to US$ 89,127,000 in 2000 and 134,185,000 in 2008.

ECUADORIAN EXPORTS OF FLOWERS BY DESTINATION MARKET - CORPEI

	2000	2001	2002	2003	2004	2005	2006	2007	2008
TM	78,830	74,235	83,636	80,368	84,859	122,192	104,172	89,796	109,006
FOB (US$ ' 000)	194,656	238,055	290,331	308,744	354,825	397,913	435,851	468,762	565,457
TM									
United States	60,013	50,689	59,939	53,859	56,104	86,350	65,606	56,705	83,452
Netherlands	5,424	8,100	6,501	7,762	8,670	10,874	11,014	9,647	7,263
Russia	2,878	3,847	4,872	6,659	6,822	7,910	12,535	9,667	7,218
Canada	2,273	2,237	2,424	2,814	2,619	2,568	2,483	1,882	1,212
Italy	1,323	1,127	1,015	1,189	1,341	1,280	1,537	1,566	1,160
Others	6,920	8,236	8,886	8,085	9,303	13,209	10,996	10,330	8,701
TOTAL	**78,830**	**74,235**	**83,636**	**80,368**	**84,859**	**122,192**	**104,172**	**89,796**	**109,006**
FOB (US$ ' 000)									
Untied States	138,570	166,343	202,369	207,112	227,529	239,504	254,041	287,255	407,172
Russia	8,426	12,700	18,304	25,218	33,391	41,156	59,094	63,032	55,248
Netherlands	15,345	19,098	23,553	26,404	34,216	47,815	48,115	41,985	37,878
Italy	3,965	3,742	4,331	5,581	6,467	6,253	7,960	9,292	7,458
Spain	1,724	2,452	3,629	4,737	6,378	10,143	10,992	12,747	6,903
Others	26,626	33,719	38,145	39,692	46,843	53,043	55,649	54,451	50,798
TOTAL	**194,656**	**238,055**	**290,331**	**308,744**	**354,825**	**397,913**	**435,851**	**468,762**	**565,457**

Source: Ecuador's Export and Investment Promotion Corporation CORPEI

ECUADORIAN EXPORTS OF FLOWERS TO THE U.S. – U.S. CENSUS

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
US$ ' 000	89,127	99,543	87,275	105,847	134,244	129,502	141,507	145,312	134,185

Source: U.S. Census Bureau, Trade Statistics by NAICS (111422)

Despite the discrepancies in the trade statistics, what is clear is the importance of the U.S. market to Ecuadorian producers. The main reasons for this importance are how close the U.S. is from Ecuador, a 3 ½ hour plane ride, and the trade preferences that Ecuador enjoys thanks to the ATPDEA. In addition, the good relations between US government agencies such as APHIS and Ecuador's floriculture sector have helped to ease and improve trade relations between these two countries by reducing inspection delays.

Ecuadoran producers and exporters face strong competition from Colombia, Mexico, African countries, China, and Central American countries. Ecuador has learned to deal with foreign competition by specializing in high-quality production that delivers satisfaction to the end florist consumer by guaranteeing a flower that lasts a minimum of seven days. Thus there's been a shift from distributing the product from major supermarket chains to florists.

The prestige of Ecuadorian floriculture sector that has been achieved at the global level is due to a combination of several factors including high quality and a large portfolio of species and varieties including tropical flowers.

In terms of marketing, exporters do not have established marketing policies. Domestic efforts of developing marketing strategies are aimed at establishing Ecuador as a denomination of origin. In addition, a marketing campaign in the U.S. and Europe, Flowers for kids flowersforkids.org, seeks to increase the demand of flowers through specialized retailers such as florists in association with Ecuadorian embassies abroad and schools.

Ecuador, with the aim of expanding its market, has either completed or started talks of free trade agreements (or economic association agreements, as Ecuadorian officials prefer to refer to this type of agreements) with Chile, the European Union, Mexico, and middle-eastern countries. Chile is the largest importer of Ecuadorian flowers in Latin America.

Policy:

INDUSTRY THREATS

The main threat to Ecuadorian flowers growers is the lack of permanent trade preferences agreements with major buying

countries, the U.S. and the E.U. Recently, Ecuador has started talks of an economic association agreement with the E.U. but the pace of the talks is rather slow. In the meantime, a large multinational, Dole Fresh Flowers has shut its operations. About 80 hectares have been abandoned and about 850 employees have been laid off. The closure, according to the company, was due to the high production costs in Ecuador and the lack of permanent preferential access to the U.S. market. High costs refer to high labor costs and air transportation costs. Ecuador is the most expensive country in the region in terms of air shipping rates. There is very little competition in Ecuador's air cargo market in part due to Ecuador's reticence to negotiate open skies agreements for passengers and cargo and political interests that have prevailed and prevented more competition among Ecuador's airport. Poor domestic transportation infrastructure only increases the overall transportation costs. Since Dole was a vertically integrated producer that concentrated almost exclusively in offering large volumes in the U.S. market, the combined disadvantage of high labor and air transportation costs meant that its operations would not be competitive. The company decided to concentrate in producing in Colombia, country that is perceived to have lower labor and transportation costs.

The constant threat that the U.S. Congress would not extend the ATPDEA is likely the greatest concern of Ecuadorian producers. Although, efforts are underway to diversify market destinations, the U.S. market is the closest and more reliable destination for Ecuadorian flowers. South Florida's Miami international airports receives most of the flowers entering the U.S. which benefit a whole new range of U.S. businesses, including truck transportation companies, refrigerated facilities, and airport services. A reduction of Ecuadorian exports to the U.S would not only be a threat to the Ecuadorian economy but also to the thousands of jobs that the flower industry has created in the U.S.

Other problems affecting the industry include high costs of electricity, telecommunications, scarce credit, but overall inadequate infrastructure to manage perishable products. The cost of transporting one kilogram of flower from Quito to Miami is between 10-20 percent higher for Ecuadorian producers, as compared to the costs faced by Colombian producers. A comprehensive comparative assessment of the transportation costs of flowers is available at http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=1801863).

ENVIRONMENTAL CONCERNS

The expectations and opportunities offered by the international market have encouraged most farms to develop strategies to improve their levels of competitiveness by demonstrating some degree of environmental awareness. There are several environmental certifications available for producers, including the industry's own certification program Florecuador. By far, the floriculture sector has taken the lead in Ecuador's agricultural sector in setting up standards and regulations aimed at guaranteeing a minimum level of social and environmental responsibility.

Among the international certifications available to Ecuadorian producers are the German certification Flower Label Program (FLP) and the Switzerland certification Max Havelaar Max Havelaar which are often a condition to do business in those countries and in others of Europe. Other environmental, security and labor certifications of Ecuadorian producers include: BASC, EUREPGAP, FFP, FLO MAX, USDA Organic, ISO 14001, ISO 9002, MPS ABC, MPS GAP, VERIFLORA and many more.

To be recipient of an environmental certification, producers must meet an extensive list of requirements which generally include a ban on the use of highly toxic pesticides, adherence to World Health Organization standards, integrated pest management, and compliance with the country's mandatory minimum wage and labor standards.

REDUCING RISK

Although much of the current short-term risk to invest in the industry is associated with the ongoing global financial crisis, there are several problems affecting the industry's long term success. Overall, a number of improvements are needed: a friendlier legal framework for investment that ensures investors of the safety of their investments in land; provision of efficient basic services: lower levels of government corruption; and friendlier diplomatic and commercial relationships that guarantee a smooth flow of trade with major buyers.

Specifically, significant reforms are necessary at Ecuador's Customs Corporation. The process to clear out-bound shipments, for instance, could be made much simpler by allowing for easier consolidation of shipments, faster

transshipments between airlines, and harmonizing and consolidating Customs operations in a single system.

The current reformed labor code is very restrictive in how companies can use occasional labor. Additional labor is particularly necessary to have during peak harvest periods such as Valentine's Day or Mother's Day. However, the most serious flaw is the lack of policy for floriculture workers, which addresses the peculiarities of the sector such as working schedule and workers' health concerns on a way that all firms are obligated to operate responsibly.

Government funded R&D is nil in floriculture. Since flowers are an export product they don't qualify for government-funded programs to improve varieties, develop new ones, or research alternative pest management tools.

Finally, a more open aviation policy would largely reduce the costs associated with exporting Ecuadorian flowers by increasing the degree of competition. Likewise, increasing the quality of domestic transportation infrastructure would also facilitate that producers can use different airports/airlines that operate from different cities.

Author Defined:

INDUSTRY FINANCIALS

The investment required for cultivation of flowers ranges from US$300,000 to $1 million per hectare depending upon the level of technology used. An estimated detailed cost structure, not including the cost of the land which can vary widely, for a typical farm is included next:

AVERAGE YEARLY COST OF PRODUCTION PER HA OF A 10-HA ROSE FARM

Materials	
Fertilizer	7,764
Fungicides	15,108
Insecticides - acaricides - nematicides	4,759
Post Harvest	21,053
Subtotal	**48,684**
Associated Services	
Flower Transport (Cayambe-Airport)	1,333
Employees Transport	2,935
Basic Services	1,446
Food staff	3,950
Fuel and lubricants	881
Subtotal	**10,545**
Sales costs	
Royalties	61,750
Sales commissions	9,794
Subtotal	**71,544**
Administrative costs	
Auditing costs	6,000
Field Workforce Salaries	73,285
Depreciation	16,130
Maintenance	5,215
Insurance	824
Office materials	1,500
Management and Salespeople Salaries	9,000
Subtotal	**111,953**
Total costs (US$)	***242,726***
Harvested stems (units)	1,080,000
Cost per stem (US$)	0.225
Opportunity cost + inflation (20%)	48,545
Average Price (US$)	0.300
Revenue (US$)	324,000
Operational Utility (US$)	81,274
Net Investment Income after opp. Cost +	32,729

inflation (US$)	
ROE %	33.484

Source: FAS Quito, 2009

As can be seen from the calculated ROE (33.5%), Ecuadorian floriculture can be a highly profitable sector. It should be kept in mind that floriculture presents economies of scale and the costs above are average for a plantation of minimum 10 hectares in size. For a plantation to be profitable, it has been observed that requires a minimum extension of 8 hectares using limited technological advanced machines for irrigation and pest spraying. High-tech plantations can require up to US$ 2.5 million in investments.

The cost of production per stem can also vary widely depending on the geographic zone where the rose is been produced and the market for which it's destined. Thus costs of production per stem oscillate from US$ 0.20 for rose destined to the U.S. market to US$ 0.60 – 1.00 for a rose destined to the Russian market. The following table illustrates these differences.

PRODUCTION COST AND REVENUE PER ROSE STEM FOR DIFFERENT MARKETS

Characteristic	Market		
	Russia	**Europe**	**U.S.A.**
Stems per sq. meter per year	40 - 50	70 - 80	75 - 110
Stems per hectare per year	400,000 – 500,000	700,000	750,000 – 1,100,000
Variable Direct Cost / hectare (U.S.$)	180,000	180,000	180,000
Cost / stem (U.S.$)	0.45 - 0.44	0.26	0.24
Average selling price (U.S.$)	0.35 - 0.4	0.25 - 0.3	0.2 - 0.25

The floriculture industry started in Ecuador in the early 1980's but was actually from the 1190's that this sector become more dynamic, mainly due to Ecuador's own trade liberalization policies and the U.S. openness to facilitate trade with Ecuador through the old Andean Trade Preference Agreement (now ATPDEA). Today, fresh flowers are Ecuador's main non-traditional agricultural export product.

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